Contents of *Veterinary Microbiology*, Volume 21

VOL. 21 NO. 1 NOVEMBER 1989

Natural infection with the porcine respiratory coronavirus induces protective lactogenic immunity against transmissible gastroenteritis
S. Bernard, E. Bottreau, J.M. Aynaud (Nouzilly, France), P. Have (Kalvehave, Denmark) and J. Szymansky (Château-Thierry, France) 1

Antigenic differentiation of pestivirus strains with monoclonal antibodies against hog cholera virus
G. Wensvoort, C. Terpstra, E.P. de Kluijver, C. Kragten and J.C. Warnaar (Lelystad, The Netherlands) 9

Detection of *Chlamydia psittaci* in free-ranging koalas (*Phascolarctos cinereus*): DNA hybridization and immuno-slot blot analyses
A.A. Girjes, A.F. Hugall, M.F. Lavin, F.N. Carrick (Brisbane, Qld., Australia) and B.J. Weigler (Davis, CA, U.S.A.) 21

Serotypes in *Cowdria ruminantium* and their relationship with *Ehrlichia phagocytophila* determined by immunofluorescence
F. Jongejan, L.A. Wassink, M.J.C. Thielemans, N.M. Perie and G. Uilenberg (Utrecht, The Netherlands) 31

Experimental induction of arthritis in LEW rats and antibody response to four *Mycoplasma arthritidis* strains
L.R. Washburn and J.R. Ramsay (Salt Lake City, UT, U.S.A.) 41

Purification and characterization of a 94-kDa *Pasteurella haemolytica* antigen
S.L. Nelson and G.H. Frank (Ames, IA, U.S.A.) 57

The specificity of antibody response in experimental and natural bovine paratuberculosis studies by crossed immunoelectrophoresis with intermediate gel
G. Krishnappa, C. Jagannath and B.U. Rao (Bangalore, India) 67

Inflammatory cell and immune function in Merino sheep with chronic dermatophilosis
T.M. Ellis, S.S. Sutherland and A.R. Gregory (Perth, W.A., Australia) 79

Book Review

Lignocellulosics 95

VOL. 21 NO. 2 DECEMBER 1989

Experimental infection of bulls with a genital isolate of bovine herpesvirus-4 and reactivation of latent virus with dexamethasone
J. Dubuisson (Liège, Belgium), E. Thiry, M. Bublot, I. Thomas, M.F. van Bressem, F. Coignoul and P.-P. Pastoret (Brussels, Belgium) 97

Purification of infectious bronchitis coronavirus by Sephacryl S-1000 gel chromatography
H. Nagano (Chiba, Japan), K. Yagyu and S. Ohta (Tokyo, Japan) 115

Culicoides: biological vectors of Akabane virus
M. Jennings and P.S. Mellor (Woking, Gt. Britain) 125

Detection of antibodies to the agent of tick-borne fever by indirect immunofluorescence
E.A. Paxton and G.R. Scott (Roslin, Gt. Britain) 133

Preliminary study of the anaerobic bacteria isolated from subgingival plaque from sheep
J. McCourtie, I.R. Poxton, J.A. Spence and G.U. Aitchison (Edinburgh, Gt. Britain) 139

Efficacy of a live *Pasteurella multocida* vaccine for the prevention of experimentally induced bovine pneumonic pasteurellosis
M.M. Chengappa, B.G. McLaughlin, W.L. Kadel, R.L. Maddux and S.C. Greer (Hopkinsville, KY, U.S.A.) 147
Bacterial growth in mastitic whey in relation to bacterial association with mastitis
L. Kaartinen, T. Ali-Vehmas, M. Sandholm (Helsinki, Finland) and T. Mattila (Espoo, Finland) 155
Serological and pathogenic characterization of *Erysipelothrix rhusiopathiae* isolates from tonsils of slaughter pigs in Indonesia
T. Takahashi, M. Ogata (Tokyo, Japan), K. Zarkasie, S. Mariana and Sumadi (Bogor, Indonesia) 165
Serum resistance is correlated with encapsulation of avian strains of *Pasteurella multocida*
L.M. Hansen and D.C. Hirsh (Davis, CA, U.S.A.) 177

Short Communications
Isolation of *Neisseria cuniculi* from a case of ovine pneumonia
D. Elad (Bet Dagan, Israel) 185
Antimicrobial resistance of *Escherichia coli* isolated from chickens
M. Chulasiri and O. Suthienkul (Bangkok, Thailand) 189

VOL. 21 NO. 3 JANUARY 1990

Comparison of the effect of various chemical stabilizers and lyophilization cycles on the thermostability of a Vero cell-adapted rinderpest vaccine
J.C. Mariner, A.E. Sollod, C. Stem, M. van den Ende (North Grafton, MA, U.S.A.), J.A. House and C.A. Mebus (Greenport, NY, U.S.A.) 195
Effects of endotoxin infusion on circulating levels of eicosanoids, progesterone, cortisol, glucose and lactic acid, and abortion in pregnant cows
S.N. Giri, P. Emau, J.S. Cullor, G.H. Stabenfeldt, M.L. Bruss, R.H. BonDurant and B.I. Osburn (Davis, CA, U.S.A.) 211
A simple staining method for the identification of chlamydial elementary bodies in the fetal membranes of sheep affected by ovine enzootic abortion
G.J.R. Dagnall and A.J. Wilsmore (Potters Bar, Gt. Britain) 233
Polypeptide and antigenic variability among strains of *Mycoplasma ovipneumoniae* demonstrated by SDS-PAGE and immunoblotting
D. Thirkell, R.K. Spooner, W.C. Russell (St. Andrews, Gt. Britain) and G.E. Jones (Edinburgh, Gt. Britain) 241
Evaluation of an ELISA for the diagnosis of experimentally induced and naturally occurring *Leptospira hardjo* infections in cattle
Z. Bercovich, R. Taaijke and B.A. Bokhout (Lelystad, The Netherlands) 255
Enzyme-linked immunosorbent assay for the detection of porcine epidemic diarrhea coronavirus antibodies in swine sera
M. Hofmann and R. Wyler (Zurich, Switzerland) 263
Blocking enzyme-linked immunosorbent assay for detection of antibodies against bovine enterovirus
A.Q. Zhang, J.R. Smith and G.W. Burgess (Townsville, Qld., Australia) 275
Reduced microbicidal activity of peripheral mononuclear phagocytic cells infected with *Pasteurella multocida*
W.M. Truscott, A.T.W. Cheung and D.C. Hirsh (Davis, CA, U.S.A.) 283

Book Reviews
Avian viruses 291
Zoonoses 292
O.I.E. Regional commission 293
ELISA techniques 294

VOL. 21 NO. 4 FEBRUARY 1990

Evidence that Cache Valley virus induces congenital malformations in sheep
S.-I. Chung (College Station, TX, U.S.A.), C.W. Livingstone, Jr. (San Angelo, TX, U.S.A.), J.F. Edwards, R.W. Crandell (College Station, TX, U.S.A.), R.E. Shope (New Haven, CT, U.S.A.), M.J. Shelton (San Angelo, TX, U.S.A.) and E.W. Collisson (College Station, TX, U.S.A.) 297
Observations on the pathogenicity for sheep and goats and the transmissibility of the strain of virus isolated during the rinderpest outbreak in Sri Lanka in 1987
E.C. Anderson, A. Hassan, T. Barrett and J. Anderson (Woking, Great Britain) 309
Effect of host cell on the in vitro characteristics expressed by two bovine viral diarrhea virus strains
J.C. Johnson (Omaha, NE, U.S.A.) and R.F. Rosenbusch (Ames, IA, U.S.A.) 319
The effect of *Mycoplasma bovis* on fertilization processes in vitro with bull spermatozoa and zona-free hamster oocytes
M.D. Eaglesome and M.M. Garcia (Nepean, Ont., Canada) 329
Surface parasitism of the fish mycoplasma *Mycoplasma mobile* 163 K on tracheal epithelial cells
C. Stadtländer and H. Kirchhoff (Hannover, Federal Republic of Germany) 339
Antibody response of the ovine lymph node to experimental infection with an ovine abortion strain of *Chlamydia psittaci*
H.-S. Huang, T.W. Tan, D. Buxton, I.E. Anderson and A.J. Herring (Edinburgh, Great Britain) 345
Protection of weaned rabbits against experimental *Escherichia coli* O103 intestinal infection by oral formalin-killed vaccine
R. Camguilhem and A. Milon (Toulouse, France) 353
The airborne survival of *Pasteurella haemolytica* and its deposition in and clearance from the mouse lung
M.I. Gilmour, C.M. Wathes and F.G.R. Taylor (Bristol, Great Britain) 363

Book Reviews
Pasteurellosis 377
Johne's disease 378
Veterinary virology 380
Classical swine fever 382

Author Index 385

Subject Index 390